



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/632,336

08/01/2003

Freddie Chang

64182-5001

3582

24574

7590

08/29/2006

JEFFER, MANGELS, BUTLER & MARMARO, LLP
1900 AVENUE OF THE STARS, 7TH FLOOR
LOS ANGELES, CA 90067

EXAMINER

DEMILLE, DANTON D

ART UNIT

PAPER NUMBER

3764

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/632,336	Applicant(s) CHANG, FREDDIE	
	Examiner Danton DeMille	Art Unit 3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

Claims 1-3, 6-8, 11, 14-16, 19, 20, 23, 28, 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Chang.

Regarding claim 1, Chang discloses a massage pad structure having a plurality of openings/chambers 311 in which massage protrusions 4 are disposed. Fig 3 shows the massage protrusion comprising a hemispherical top 40 disposed on the top surface 31. When a user places his/her foot on the hemispherical top, a vertical force is applied and the top is depressed further into the chamber. The elastic tension member not numbered in the drawings acts on the massage protrusion 4 to be in a floating state when it is not pressed. The massage protrusion 4 further comprises a root section 402 coupled to hemispherical top through the opening 311. This root section is also movable disposed in and limited by the chamber following the same logic. Chang also teaches a ball and socket arrangement between the lower end 420 of the spring-loaded massage rod 40 and the retaining member 48. This ball and socket arrangement will allow the massage protrusion to tilt relative to the top surface. Moreover figure 3, clearly shows hole 321 is larger than the diameter of the massage protrusion allowing the massage protrusion to pivot to any angle. The purpose of the ball and socket arrangement is to allow the massage protrusion to freely pivot from any forces coming at any angle. Moreover, Chang teaches grooves 480c formed on the upper surface of the retaining member 48 to provide a cushioning effect to the ball 480a even when the spring-loaded massage rod 40 is depressed in a slightly inclined direction relative to an axis of the rod 40. Clearly Chang provides structure that

compensates when forces applied to the massage rod are inclined relative to the axis of the massage rod 40.

Regarding claim 2, massage protrusion 4 comprises connecting pillar 40.

Regarding claim 3, root section 402 comprises a hemispherical bottom with a diameter greater than that of the opening. The hemispherical bottom is coupled to the connecting pillar.

Regarding claim 6, an elastic tension member supporting the root section 48 is disposed in the chamber and supports the root section by providing a "cushioning effect (Col 2 line 50).

Regarding claim 7, see fig 3 for an illustration of the claimed features.

Regarding claim 8, the massage protrusion 4 also resembles a water drop shape, with a tapered portion provided at the junction of the hemispherical bottom 402 and neck section 40.

Regarding claims 11 and 23, the plastic hemispherical top of the massage protrusion is coated with a far infrared converting material. Plastic would absorb IR and reflect IR and therefore comprehend the claimed "converting". Applicant has provided as evidence "ASU Thermal Infrared Mineral Spectroscopy Laboratory" for supporting the claim language. The article cites that materials are examined by how they reflect IR. It is true that minerals reflect IR from sunlight. Most matter does. The plastic of Chang reflects IR and therefore comprehends the claims.

Regarding claims 14, 28 see fig 2. A mat 31 having a plurality of holes, a pad plate 33 and a middle layer 32 sandwiched between the two are shown. See rejection of claim 1 for the remaining claimed features.

Regarding claims 15, 16, 19, 20, see respective rejections of claims 2, 3, 6, 7.

Claims 4, 5, 17, 18, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Horibata (US 5,752,329).

The Chang reference lacks an arresting ring disposed at the bottom portion of the connecting pillar. Horibata discloses a massaging surface that at least one stimulating piece, or massage protrusion 5 (col 3 line 52) that is shown to comprise a connecting pillar and an arresting ring. The arresting ring is shown to be larger in diameter than the opening in which the massage protrusion is enclosed. It would have been obvious to one of ordinary skill at the time the invention was made to provide the massage protrusion of Chang with an arresting ring with a larger diameter than the opening in which it is enclosed as taught by Horibata in order to prevent the escape of the massage protrusion.

Regarding claim 29, Horibata teaches a protrusion that has a hemispherical head that is larger than the connecting pillar. There is no unobviousness to the exact shape of the massaging protrusion. Such is dependent on the type of stimulating massage desired. It would have been obvious to one of ordinary skill in the art to modify Chang to shape the top of the massaging protrusion to be larger than the connecting pillar as taught by Horibata to shape the stimulating protrusion to stimulate a larger area of the foot.

Claims 9, 12, 21, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Shen (US. 5,096,188).

Regarding claims 9, 21, Chang lacks a magnetic member embedded in the hemispherical top of his massage protrusion. Shen discloses a massage pad structure that has a plurality of openings for the insertion of massage protrusion 2. This protrusion comprises a root section coupled to a hemispherical top. Fig 3 shows element 23, a magnet embedded in the

hemispherical top. It would have been obvious to one of ordinary skill at the time the invention was made to provide a magnet to the hemispherical top of the massage protrusion of Chang as taught by Shen in order to provide the foot with the benefits of magnetic therapy.

Regarding claims 12,26, the said magnet of Shen is embedded in a groove. It would have been obvious to one of ordinary skill at the time the invention was made to provide a groove for the insertion of a magnet or other therapeutic material.

Claims 10, 22, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang.

Regarding claims 10, 22 it would have been obvious to one of ordinary skill at the time the invention was made to construct the massage protrusion out of a ceramic material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 25, Chang is silent with regard to any use of an attachment Layer disposed on a lower surface. However, the examiner takes official notice that the use of an attachment Layer to join elements in footwear is old and conventional. Therefore it would have been obvious to provide the footwear as taught by Chang with an adhesive interface on one of the lower layers to facilitate combining the elements together.

Claims 13, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Kim (US 6,434,859).

Chang lacks a massage pad structure that contains a hemispherical top that includes an opening on a top surface. Kim discloses such a structure in figs 3 and 4. An opening 4 is shown

on the top surface of massage protrusion 2 for the exhaustion of air. It would have been obvious to one of ordinary skill to provide the footwear of Chang with an opening as taught by Kim in order to allow the release or deposit of material into the massage protrusion.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Hook (US 4,509,510).

Chang lacks a dirt isolating Layer that covers the plurality of massage protrusions. This structure is disclosed by Hook, who teaches a massaging device that comprises a air tight cover 14 set over a plurality of massage protrusions 12. This arrangement would isolate the massage protrusions and prevent the intrusion of dirt or other particles into their vicinity and crevices. It would have been obvious to one of ordinary skill to provide the footwear of Chang with a dirt isolating layer as taught by Hook in order to prevent the intrusion of dirt and/or other particles into its crevices.

Response to Arguments

Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

The examiner respectfully disagrees with the applicant regarding Chang not teaching the massaging protrusion is tiltable. Figure 3 clearly shows the ball and socket arrangement between the massaging protrusion and the root section 48. This ball and socket arrangement is for the purpose of allowing the massaging protrusion to tilt relative to the root section. Moreover, the root section 48 is smaller than the width of the chamber allowing the massaging protrusion to tilt. Moreover, the opening 321 is larger than the connecting pillar 40 of the massaging protrusion to allow the connecting pillar to tilt. Moreover Chang teaches that there is a cushioning effect

when the spring-loaded massaging protrusion 40 is depressed in a slightly inclined direction relative to an axis of the protrusion 40. Therefore, Chang anticipates the invention as claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danton DeMille whose telephone number is (571) 272-4974. The examiner can normally be reached on M-F from 8:30 to 6:00 EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson, can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 3764

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

25 August 2006


Danton DeMille
Primary Examiner
Art Unit 3764